

ECAD6008 - Professional and Pedagogic Studies: Leading the Learning: what, how and why am I teaching?

Saturday, January 4, 2020 5:53 PM

Prepare a portfolio (as though you were sharing with a mentor or student colleagues) which illustrates a critical reflection of progress made on the planning and implementation of three pedagogical principles.

Enw/Name: Michael Scourfield.

Rhif myfyriwr/Student number: 1600512.

Llwybr/Pathway: P-PGCE.

Targedau o'r aseiniad blaenorol/Targets from previous assignment: https://uowtsd-my.sharepoint.com/:o/g/personal/1600512_student_uwtsd_ac_uk/EtfN0dpSgmdMkcQN85vhFRsBsensM0jJpU_vlz8yakbTzQ?e=oL3neQ

	Targed/Target	Yr hyn yr wyf wedi'i wneud yn yr aseiniad hwn/What I have done in this assignment
Targed/Target 1	Ensure you proof read prior to presenting the work.	I have read through everything to ensure everything has been double-checked.
Targed/Target 2	Ensure all referencing is accurate throughout.	I have updated my knowledge of how to reference and have tried to be as accurate as possible.
Targed/Target 3		

Dolen i OneNote/Link to OneNote:

Illustrative example 1 (Figure 1.1)

Saturday, January 4, 2020 6:10 PM



Figure 1.1 shows a collage of photographs taken on a trip to St Fagans National Museum of History. During the trip, my mentor and I ensured the learners were being intellectually stimulated through the exploration of the buildings on site and through the use of discussion. When we returned to school after the trip, I put the photographs into an order so that the buildings we visited were in chronological order and we recapped the discussions which took place on the trip. It was found that the vast majority of the learners could recall the precise details of the discussions which took place on the trip, which suggests that Renninger *et al.*'s (2002) claims that initiating interest can enable learning to become more memorable. This enabled me to learn that creating an authentic context would allow for effective learning as the content would be more memorable for the learners. This effective learning continued through the topic of chronological order – after visualising how houses have changed over time, the learners were able to create an abstract order, which they then understood was chronological order. This enabled me to understand that whilst the learners memorised the work well, they were able to analyse it and transfer it to other concepts.

Illustrative example 2 (Figure 1.2)

Saturday, January 4, 2020 6:11 PM

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	- The lesson will begin with a carpet session. - The lesson structure will be shared with the students, as well as the success criteria. - The children will be informed that they will be going outside during this lesson and should thus dress accordingly, taking weather into consideration. - The children will also be informed that they will be practicing the adding of bonds up to 10.	The pupils will be expected to dress accordingly, taking the weather into consideration.	- Coats. - Scarves. - Gloves. (All depending on the weather).
Teaching & Core Learning	- The groups will be split up into their ability sets. - One group will work with myself to work on this further, the others will be expected to work with the enhanced provision. - When working with myself, the students will be expected to collect leaves from outside. - Development of the Welsh language will be encouraged.	- When the pupils have collected the leaves, they will be expected to solve some sums, e.g. 6 leaves + 2 leaves = ? - They will then be able to describe the colour of the leaves, e.g. melyn dail, coch dail, brown dail neu oren dail. Differentiation - For the more able students, more leaves will be used, posing a greater challenge. - Also, for the more able students, an introduction to subtraction could be implemented.	Leaves.
		For the less able students, fewer leaves will be used, posing a more insignificant challenge.	
Plenary	- The whole class will congregate on the carpet area. - They will be asked questions to review the lesson. - What colour leaves did we see? - What would ___ leaves + ___ leaves be?	The pupils will be expected to respond to the questions (independently if possible).	None.

This is a plan of a lesson within which I took learners outside for outdoor learning. While the classroom theme is 'Community Explorers' and it was autumn, I wanted to give the learners an opportunity to tie both of these things together and have an autumn-themed lesson within an authentic context. This involved going outside to the school's field which was full of different colour leaves. As this school promotes the Welsh language, I asked the learners to tell me which different colour leaves there were on the ground in Welsh: they replied with "coch" (red), "oren" (orange), "brown" (brown) and "melyn" (yellow). To reinforce the learning from a prior lesson, I reminded them that 'dail' is 'leaf' in Welsh. We then tried to add up the leaves in both English and Welsh:

- "If I had dau dail and wyth dail, how many leaves would I have?"
- "If I had six oren dail, three coch dail and one brown dail, how many red leaves do I have?"

I found within this approach to teaching that the learners were very adventurous within their learning and there was evidence to support Donaldson's claim that it can benefit "motivation and attitudes towards learning" (2015; p.39). It also supported Renninger *et al.*'s (2002) assertion which claimed that initiating interest can enable the learners to memorise the content of the learning better. At this time, this approach certainly maintained the standard set within *Figure 1.1*.

Illustrative example 3 (Figure 1.3)

Saturday, January 4, 2020 6:11 PM

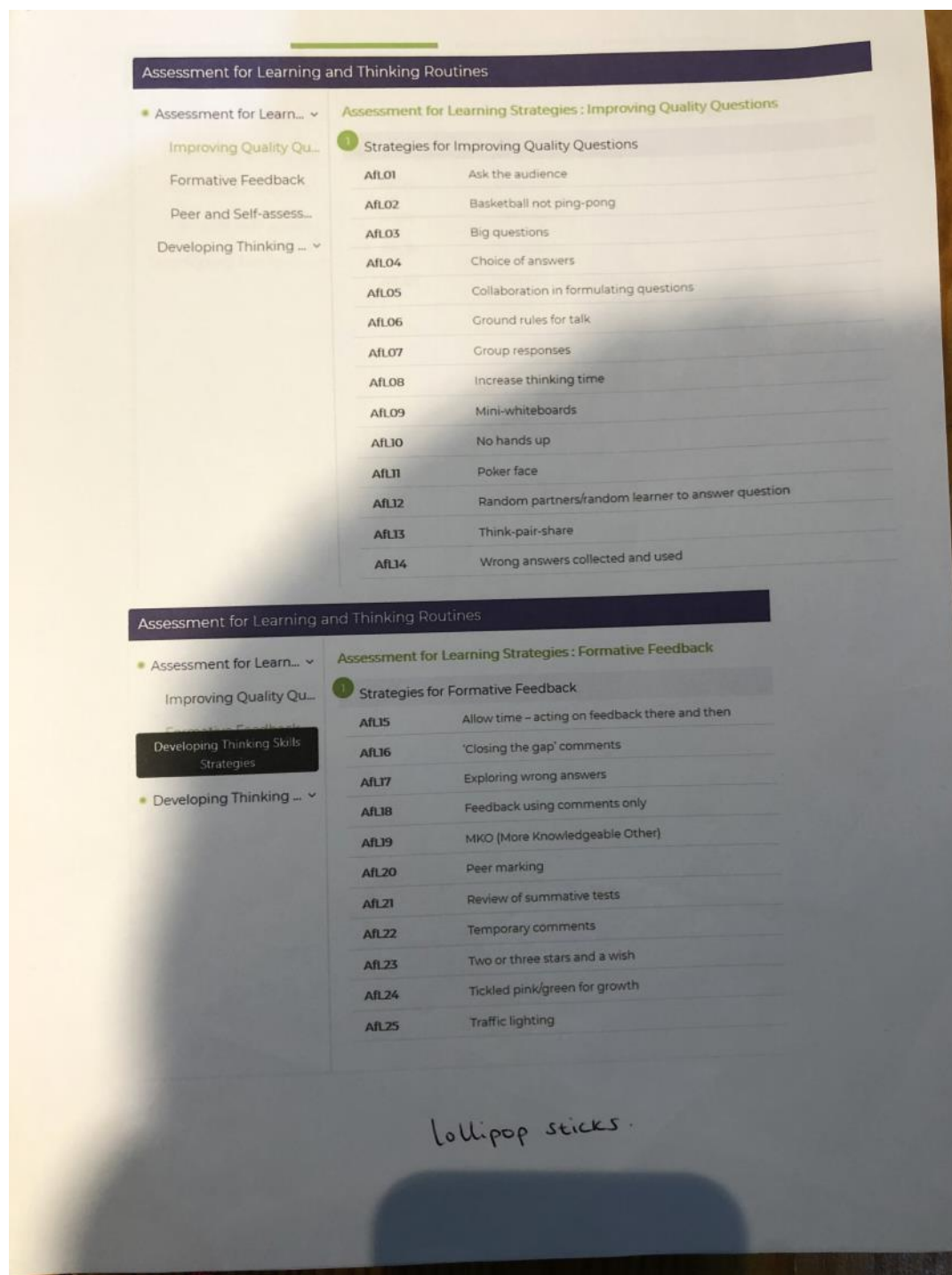


In comparison to *Figure 1.1* and *Figure 1.2*, this is very dissimilar but suggests a lot about the previous examples. An important note to consider is that this lesson took place later than the previous examples. However, this was a greater learning curve. Within this lesson I found that the implications of creating this context for learning was not as beneficial (in considering Donaldson's (2015) and Ainley *et al.*'s (2002) claims about the benefits) as the previous examples. Within this lesson I tried to implement numeracy within an authentic context and enable the learners to learn about how place value can be found within the 'real world' (Donaldson, 2015). Therefore, I used coins and place value cards and I would show a number and the learners would show me their learning by putting together a correct sum of coins to make this number. It should be noted that initially the learners were engaged because of their interest of learning with tangible objects (Renninger *et al.*, 2002) and I thought that they would be more interested as they might perceive this task as a 'grown up' task due to the involvement of money. However, I found that it did not yield the same benefits as *Figure 1.1* and *Figure 1.2*.

It is possible that this is due to the fact that I did not see if the task was authentic enough. Although it involved the use of tangible objects, they were still within a classroom context and thus the concept was still an abstract one (Collins, 2004). A more authentic context (Donaldson, 2015) could possibly have been a solution to this. One with a transactional nature – such as within a shop context.

Illustrative example 1 (Figure 2.1)

Saturday, January 4, 2020 6:10 PM



During the observation week within PTE1, we were expected to collect important information regarding a number of things associated with our placement (such as policy documents, information about the class we were based in, etc.). As there has been a big shift towards formative assessment (Welsh Government, 2014), within this information I received a document (as shown above) which contains the names of the assessment for learning (AfL) strategies which the teachers within the school generally use. It was my responsibility to familiarise myself with these strategies, ready for their implementation within lessons I would plan and lead. As I was based within the foundation phase, I should stress that I was encouraged not to use strategies based on peer assessment as the ability level of the learners were not at an appropriate level yet.

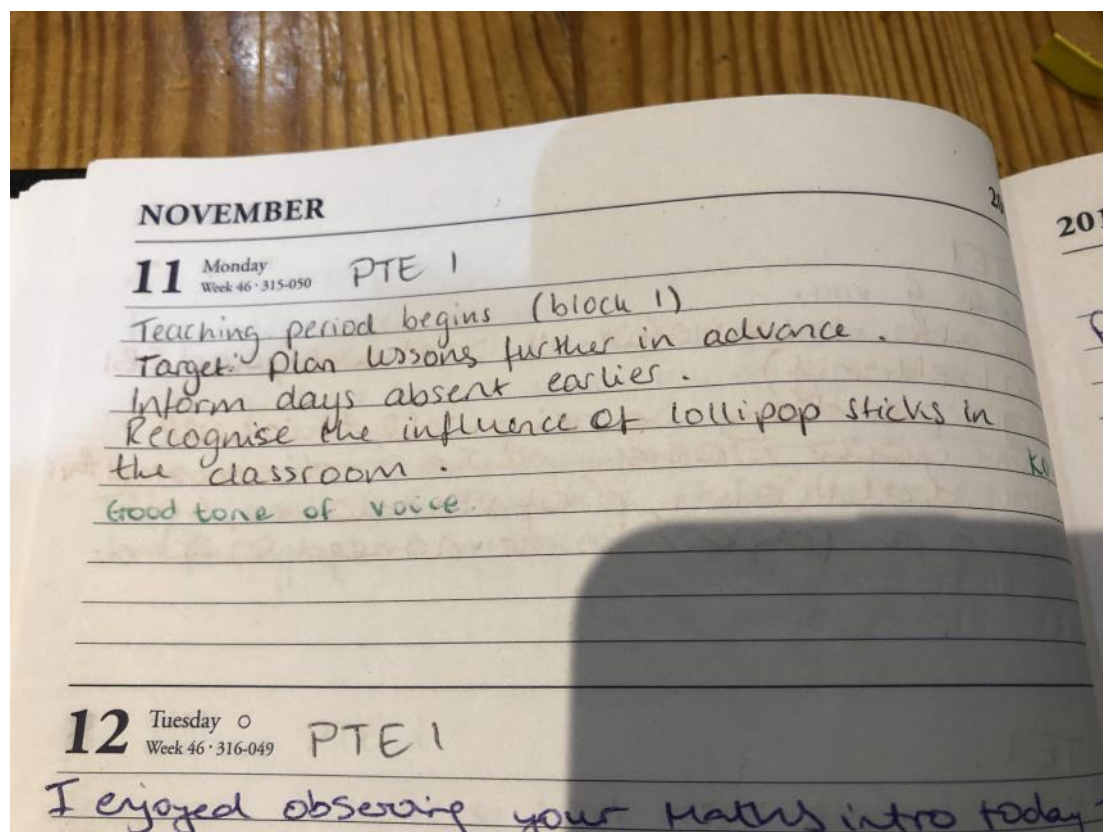
Special attention was paid to *lollipop sticks* (which was not on the document but was added in writing by my mentor) which is a form of *random partners/random learner to answer questions*

highlighted by Welsh Assembly Government (2010). It should be highlighted that these were not the only AfL strategies used but rather this was a foundation which I was able to work upon. Upon reviewing each lesson led by myself, the teacher and I would look at the positive elements as well as the parts of the lessons which could have been improved by the use of these strategies and I would take it upon myself to test it the following lesson.

I should note that the class I was introduced to was already familiar with the strategies used so the standard was already at a good level. However, at this point I was not familiar with seeing this concept in practice. Therefore, during my observation week, I observed closely and recognised the implications of this approach to assessment (Hattie, 2012; Welsh Government, 2010).

Illustrative example 2 (Figure 2.2)

Saturday, January 4, 2020 6:11 PM



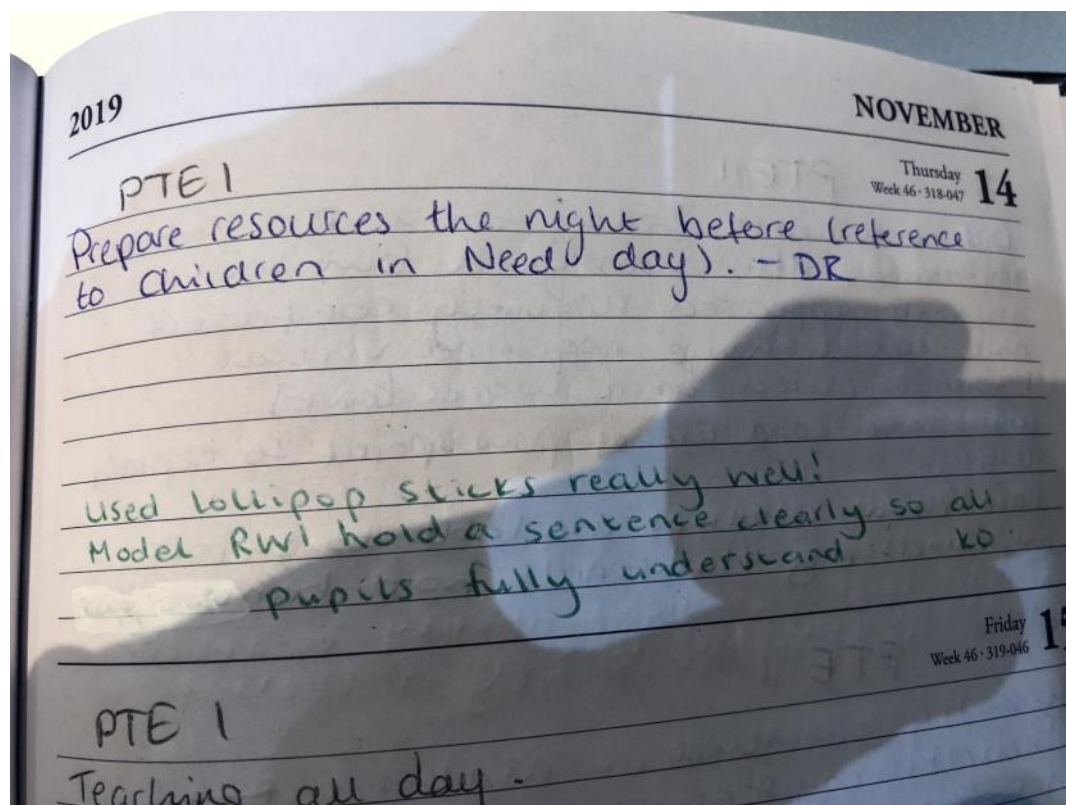
Above is an extract taken from my daily journal. The daily journal is an A5 notebook in which myself and my mentor would review and comment upon each day within my PTE. Every day, I would write my feelings on how each day went and I would write about a target which my mentor and I would agree on and my mentor would then write her comment using a green pen.

After some research I attempted to implement some assessment for learning strategies within my lesson. However, the class was particularly fussy (too many answers called out at the same time after requesting hands-up, talking over the teacher, etc.) and I had found it challenging to keep them under control. Some research suggested that this is because I did not implement it correctly (Bell & Cowie, 2001; Clinchot *et al.*, 2017) whereas other research indicated that I did not use the appropriate strategies (Welsh Government, 2010).

I had a discussion with my tutor because I believed that only some of the class benefitted from these strategies, failing to maintain a learning for all philosophy (OECD, 2014). My teacher and I agreed that the issue with the lesson was that there was a lot of fussiness and it was difficult to maintain the focus. We then identified lollipop sticks as a possible solution, and I prepared the resources (Marin, 2014) ready for the next lesson.

Illustrative example 3 (Figure 2.3)

Saturday, January 4, 2020 6:11 PM



Above is a second extract taken from my daily journal which shows an indication of how my practice has changed during my PTE. Within this context, the class was particularly fussy again and appeared similar to the context within *Figure 2.1* where the learners would call out answers or talk whilst I am talking. So, taking on board the advice from my mentor and literature from the Welsh Government (2010), I used lollipop sticks as an assessment for learning strategy to enhance the learning of the class as a whole. After the lesson, my mentor and I agreed that there was a considerable improvement from the previous lessons.

This example shows that my practice has considerably improved as the benefits for using this strategy were far more prominent (Hattie, 2012; Welsh Government, 2010).

Illustrative example 1 (Figure 3.1)

Saturday, January 4, 2020 6:10 PM

Reception, EPIC Enhanced Provision, Topic: Community Explorers

<u>Writing Area</u> Match bossy verbs to pictures.	<u>Maths Area</u> Making 5/6/10	<u>Creative Area</u> Rubbings of different materials.	<u>Construction</u> Building houses/building with the lego.	<u>Whiteboard</u> Interactive maths games Star-Fish Shack
<u>Welsh Role Play - Mrs Owen</u> Welsh post office	<u>Role Play - Mrs Davies</u> Doctors surgery	<u>Small World</u> Community buildings	<u>Interest Area</u> Matching materials to properties.	<u>i-pad area</u> Beebot app
<u>Reading Area</u> Sentence building 'I saw a	<u>Funky Fingers</u> Symmetrical butterflies using tweezers.	<u>Outdoor/Physical</u> Building houses.	<u>Cwtch Cymraeg</u> Tric ar clic games.	

The word *reception* should not be here. This is a mistake as my mentor taught reception the previous year and had forgotten to change the template.

Figure 3.1 is a template which is dedicated to the planning for enhanced provision. This template is modified each week within PPA sessions. Each activity is better known as a *challenge* within the classroom. Whilst the *challenges* may change each week, the higher order theme (i.e. writing within the writing area, maths within the maths area and creativity within the creative area) remain consistent. As this is the case, similarities of some sort can be found within each week's *challenge*. This gives the learners the opportunity to practise their cross-curricular responsibilities - literacy and numeracy and digital competence (Donaldson, 2015). Skills which incorporate literacy and numeracy skills are predominantly found within the writing area, reading area and maths area but can also be found within the iPad area, outdoor/physical area, whiteboard area and the construction area. Meanwhile, learners are able to develop their digital competence within the whiteboard area and iPad area.

This sheet was given to me during a time when I had no experience and very little knowledge of cross-curriculum responsibilities. When I was given this, my mentor and I sat down together and I recognised that even though there was to be a greater workload (Donaldson, 2015), with better preparation (Marin, 2014) the benefits would be significant (Marzano, 1991; Donaldson, 2015; Arthur *et al.*, 2013). This set the foundation for my progress.

Illustrative example 2 (Figure 3.2)

Saturday, January 4, 2020 6:12 PM

Time	Activities/Methodology/Key Concepts (Teacher's Role – including key teaching points, differentiation strategies and key questions)	Pupil Tasks (Pupils' role –including differentiation, engagement in formative assessment and homework)	Resources (Including Health and Safety requirement)
Opening phase (with links to prior learning)	- The lesson will begin with a carpet session. - The lesson structure will be shared with the students, as well as the success criteria. - The children will be informed that they will be comparing and contrasting old pictures with new houses.	- Using the laminated illustrations of various houses throughout history, the students will visually analyse the houses and compare and contrast the old houses and the modern houses. <i>What differences can you tell me?</i> <i>What are the houses made of?</i> <i>Would it be colder or warmer in the older houses?</i> <i>Would there be more rooms inside the older houses or newer houses?</i>	- Laminated illustrations of various houses throughout history. - Velcro.
Teaching & Core Learning	- The groups will be split up into their ability sets. - One group will work with myself to work on this further, the others will be expected to work with the enhanced provision. - When working with myself, the students will be given the laminated illustrations of various houses throughout history. - The pupils will be able to work within smaller groups and will be able to extract	- As a smaller group, the students will be expected to describe the characteristics of the old houses as well as the modern houses using a word bank provided. - This time, it will be made more challenging as there are fewer people, meaning that there is a smaller resource pool. Differentiation	- Laminated illustrations of various houses throughout history. - Velcro. - Word bank. - Old/new table.
	suggestions from a word bank which they can use to describe old/modern houses.	- The more able students will be expected to write out the characteristics provided within the word bank. - There are three different levels within the word banks – level 1 will have more words, level 3 will have fewer words and level 2 will be in between. - The less able students will be expected to cut out the words from within the word bank and stick them in their book.	
Plenary	- The whole class will congregate on the carpet area. - They will be asked questions to review the lesson. - What do you think it would have felt like to live in this/that house? - What differences surprised you most?	The pupils will be expected to respond to the questions (independently if possible).	- Laminated illustrations of various houses throughout history. - Velcro.

I went on a trip to St Fagans National Museum of History with the class to learn about the types of historical buildings which would have been found within Wales (a topic within our history lessons). This trip was also associated with the theme of 'Community Explorers', so we investigated how buildings within our community have changed over time. Within this topic we also explored the topic of chronological order and put the photographs of the buildings we visited in St Fagans into chronological order. After this, I encouraged the learners to write a recount of the trip, describing everything in chronological order. According to Donaldson, writing a recount enabled the learners to practise skills which are fundamental to everyday life (2015). This task could possibly have been perceived as being too complex for a group of Year 1 students, however with the involvement of learning within authentic contexts, the learners appeared more interested (Renninger *et al.*, 2002).

Although there was an indication of progress being made, there was research suggesting that I needed to implement this pedagogical principle more carefully (Coe *et al.*, 2014) so that I could yield even greater benefits. It could also be possible that this example would not have been so successful without the use of modifying contexts for effective learning. Therefore, more research into the successful implementation of cross-curricular responsibilities (Coe *et al.*, 2014) would increase the chance of yielding these results.



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Yr Athrofa
Institute of Education
Addysg i Gymru Education for Wales

Cynllunio i Gyfoethogi'r Ddarpariaeth
Planning for Enhanced Provision



Figure 3.3 shows a more up-to-date version of the planning for enhanced provision template. One box is highlighted which says that the learners will be participating in an interactive maths game. In considering that within *Figure 3.1* I didn't have any sound knowledge nor experience with cross-curriculum responsibilities, this figure shows how far the implementation of this pedagogical principle (Donaldson, 2015) has come.

I carried out the research suggested by Coe *et al.* (2014) and attempted to implement this pedagogical principle with more care. Henceforth, I made the most of my resources, looked online and found interactive games which incorporate the use of numeracy and digital competence. Amidst the progress of this practice, I recognised how these skills could aid learners in their everyday lives (Donaldson, 2015). The implications of this approach resulted in learners becoming independent in their learning (Donaldson, 2015) in the sense that they were able to set up this game (thus practising their digital competence) and complete the activity (thus practising their numeracy skills).

When comparing *Figure 3.1* and *Figure 3.3*, it is clear to see that significant progress has taken place but I may have to develop my ability to implement this pedagogical principle further. It is possible that dedicating more time to preparing could play a vital role in this (Marin, 2014).

Discussion

Saturday, January 4, 2020 6:56 PM

2015 witnessed Professor Graham Donaldson publish *Successful Futures* – a document with recommendations for change within the Welsh National Curriculum. This document contained extensive and precise evaluations into various factors affecting the delivery of education within Wales; one of which being the implications of an effective pedagogy (Donaldson, 2015). Within this section of *Successful Futures*, Donaldson developed twelve pedagogical principles which he believed can contribute to the successful delivery of education while drawing attention to the four purposes of education (Donaldson, 2015).

This essay intends to investigate how three of these pedagogical principles have been implemented within my Professional Teaching Experience (PTE) whilst critically reflecting upon how the delivery of these principles has progressed since the beginning of my PTE. It is worth noting that the context of this critical reflection is set within a Year 1 classroom of 29 students within a primary school in Swansea, South Wales.

The topic of *effective teaching and learning* (or similar titles, such as good teaching, teaching effectiveness, etc.) has been investigated widely and specifically both historically and contemporarily, with focuses shifting over time. For instance, prior to the 1960s, much discussion had been determined by discovering a common set of characteristics all good teachers have (Kyriacou, 2009) – similar to the *Great Man theory* (Carlyle, 1841). Although this has changed over time, and there is now a greater focus on the events which occur within the classroom (Kyriacou, 2009).

However, it would be incorrect to conclude that there is a consensus on what good teaching entails (Coe *et al.*, 2014). An indication of this can be found in the diverse areas of investigation within research. NFER and Arad Research (2013) concluded that good teaching would help learners develop a suitable skill set which would enable them to become lifelong learners, ready to play their part within work and society. An alternative point of view is Coe *et al.*'s (2014) – who believe that effective teaching should be measured on the progress made by the learners, rather than assessing them against a yardstick of some sort.

Other researchers, such as Kyriacou (2009), have focused more on the *process of learning* (the way in which learners learn) as well as the *result of learning* (which the work of NFER and Arad Research (2013) and Coe *et al.* (2014) focus on), simultaneously recognising that the value of both of these are equal. Evidence of this increasing awareness can be found in the wide range of teaching approaches (Muijs and Reynolds, 2005; Wilen *et al.*, 2008) being centred around more active pupil involvement (Watkins *et al.*, 2007).

Although notions of effective teaching and learning are evidently dissimilar, an important note to consider is that each of these notions are consistent with Donaldson's purposes of education (2015); the product of education should be children or young people who are:

- “ambitious, capable learners who (...) are ready to learn throughout their lives”;
- “enterprising, creative contributors who (...) are ready to play a full part in life and work”;
- “ethical, informed citizens who (...) are ready to be citizens of Wales and the world”;
- and
- “healthy, confident individuals who (...) are ready to lead fulfilling lives as valued members of society”.

(Donaldson, 2015; p.29-30).

While this is the desired outcome for learners, an important point to consider is that there is no single correct way of teaching (Donaldson, 2015). Nevertheless, contrasting views have considered that good teaching is when a teacher is able to meet the planned goals and/or needs of the school and learners (Campbell *et al.*, 2004). While these philosophies would enable teachers to have room for innovation, Donaldson's *Successful Futures* (2015) provides guidelines – pedagogical principles – which can enable the fulfilment of these purposes. The three pedagogical principles which this essay will pay close attention to are outlined below:

Pedagogical principle 6: Good teaching and learning creates authentic contexts for learning.

Pedagogical principle 7: Good teaching and learning means employing assessment for learning principles.

Pedagogical principle 9: Good teaching and learning regularly reinforces Cross-Curriculum Responsibilities, including literacy, numeracy and digital competence, and provides opportunities to practice them.

(Donaldson, 2015; p.67-68).

Although literature indicates that creating authentic contexts for learning is a relatively new concept which hadn't been accurately defined until the early twenty-first century (Rule, 2006), Maina (2004) defined this concept as learning through activities which reflect situations found within the real world. *Successful Futures* (Donaldson, 2015) suggests that this plays a big role within effective teaching because the result of this principle's implementation can enable learners to understand and establish connections between the content of their learning and the real world. In turn, learners would be able to continue to learn with confidence within a familiar environment even after leaving school. This concept of learning within modified contexts which relate to real-life scenarios has certainly received widespread recognition for its association with effective teaching and learning (Alioon & Delialioğlu, 2017; Kiernan & Aizawa, 2004).

The education and training inspectorate within Wales, Estyn (2018), found that this process of learning is richer due to the fact that learners are able to experience their learning and attempt new things and methods whilst understanding how and what is incorrect. However, Renninger *et al.* (2002) claim that the main benefit is this principle's ability to initiate interest within the learners. This point of view indicates that this approach could open the door to allowing the learning activities to become more memorable, thus enabling the learners to build on prior knowledge (Renninger *et al.*, 2002). This is opposed to learning within the classroom – which has been labelled as abstract learning and disconnected from real-life contexts (Collins, 2004) despite the wealth of literature on teaching within classrooms.

Research as recent as 2017 has indicated that schools have neglected the cultivation of authentic contexts for learning and the result has therefore led to ineffective teaching (Alioon & Delialioğlu, 2017). However, it is important to consider this approach because research has indicated that this approach is associated with richer learning (Ainley *et al.*, 2002; Harackiewicz *et al.*, 2008; Schiefele, 1990; 1991) and the improvement of other characteristics such as persistence (Ainley *et al.*, 2002), pupil engagement (Flowerday *et al.*, 2004) and self-efficacy (Harackiewicz *et al.*, 2008; Hidi & Ainley, 2008) – all of which can contribute to the four purposes of education (Donaldson, 2015). This approach has received recognition widely and wealthily, ranging from inspectorate bodies, to researchers and to curriculum reformers, such as Donaldson (2015). Henceforth, there is certainly evidence which can lead people to conclude that effective teaching would include an abundance of modified learning environments which depict real-life contexts.

Assessment for learning is a form of formative assessment (Donaldson, 2015) which, according to the Welsh Government (2014), has not been properly understood nor

implemented within Wales. According to Donaldson (2015), this approach to assessment enables teachers to analyse the feedback from the learners' learning and identify the appropriate next steps. While it has been highlighted within an OECD report (2014) that it was crucial that assessments maintain a learning-for-all philosophy, it should also be pointed out that this approach to assessment requires next steps appropriate for each individual learner – not for a class or group as a whole. So, one drawback to take into account with regards to this approach is that this approach would require a greater workload from teachers (Gardner, 2012). However, a counter point of view claims that there is a significant requirement for assessment reform within Wales (Donaldson, 2015).

Research has suggested that there are differing perspectives on the prime reason why this would be associated with effective teaching and learning. Donaldson claimed that it is because of the improved standards of attainment along with carefully developed ambition (2015). Meanwhile, others claim that it is the improved self-efficacy (Hattie, 2012; Welsh Government, 2010) or entrepreneurial thinking (Welsh Government, 2010) which are the main associations with effective learning.

In considering that assessment within education should support learning (Gardner, 2012), and there are multiple positive learner outcomes, there is clear evidence that teaching should employ assessment for learning strategies if it intends to be effective. However, it should be noted that it should be applied carefully. Assessment for learning should not be used excessively at a fixed-point during lessons but rather it should be administered in *chunks* and used throughout lessons. Evidence to support this is provided by other researchers who dictate that formative assessment is an ongoing process which aids the learner by enhancing the learning during the process of learning, rather than at a single point (Bell & Cowie, 2001; Clinchot *et al.*, 2017).

Successful Futures (Donaldson, 2015) indicated that for effective teaching to be visible across the curriculum then literacy, numeracy and digital competence should be implemented as cross-curriculum responsibilities. Research perceives this concept as a means of integrating activities which incorporate these responsibilities across a range of subjects (such as humanities, STEM subjects or subjects within the arts) as opposed to perceiving them as isolated subjects with barriers (Donaldson, 2015; Hayes, 2017).

It is possible that this could lead to ineffective teaching as it was noted within *Successful Futures* (Donaldson, 2015) that this approach will welcome a greater workload requirement with regards to maintaining focus and effort. Despite this, Coe *et al.* (2014) dictate that this implementation is a necessity and that there is already moderate evidence of the positive impact classroom management can have on student outcomes. This notion of classroom management is centred around managing resources to maximise learning (Coe *et al.*, 2014) – therefore, as there is evidence that it impacts the effectiveness of teaching, teachers should take care when implementing these cross-curriculum responsibilities.

Possible reasoning behind the selection of these specific subjects could be because of the growing realisation that these skills are fundamental to learning in life (Donaldson, 2015; Arthur *et al.*, 2013). This would enable learners to improve their competence in the use of these skills even after they leave school, whether they continue to learn, play their part within society or both (Donaldson, 2015). Another reason is because of the increasing awareness of how perceiving these as cross-curriculum responsibilities enables learners to practise these skills and understand the relevance of these skills to the different contexts within the 'real world' (Donaldson, 2015; Hayes, 2017; Coe *et al.*, 2014) – meaning that effective learning can take place autonomously within multiple contexts.

Henceforth, in considering these benefits, effective teaching with regards to cross-curriculum responsibilities will include the implementation of literacy, numeracy and digital competence across the curriculum (Coe *et al.*, 2014; Donaldson, 2015). However, it should be noted that its application should be done carefully so that there is not a negative impact on student

outcomes (Coe *et al.*, 2014). This is important as there is research which suggests that learners are able to transfer concepts to more relevant contexts which can initiate interest (for example, see Marzano, 1991). This can, in turn, develop learning in a number of other areas as the 'barriers' between subjects are removed (Hayes, 2017).

Reflection and next steps

Saturday, January 4, 2020 6:10 PM

During my PTE, my mentor's teaching philosophy was centred around offering different contexts for learning which would invite active pupil involvement – which Watkins *et al.* (2007) say is the key to effective learning. *Figure 1.1* shows the first opportunity I had to practise this same philosophy. This approach enabled learners to 'step into their learning' and experience the historical buildings actively. The learners appeared to be able to recall the precise details of their experiences even weeks later as this approach initiated interest and allowed the learning to be more memorable (Renninger *et al.*, 2002).

Within *Figure 1.2*, the learners continued to make connections between their learning and the community (Donaldson, 2015) and mould new concepts (Estyn, 2018). This is important to note as the content of the learning could be considered complex for a Year 1 class; however, the learners did not appear to be fazed by this and sought to engage with the activity. The learners showed signs of increased persistence (Ainley *et al.*, 2002) and self-efficacy (Harackiewicz *et al.*, 2008; Hidi & Ainley, 2008), henceforth resulting in richer learning (Ainley *et al.*, 2002; Harackiewicz *et al.*, 2008; Schiefele, 1990; 1991).

However, these results do not correlate with *Figure 1.3*. Although this context involved numeracy and tangible items, there was not enough voluntary involvement and it did not yield the same outcomes as the previous examples. After my research, I concluded that it could be because the context didn't have as much authenticity as the previous examples. In order for the learner to construct links between the content of their learning and the 'real world' (Donaldson, 2015), I realised that a context with a transactional nature, such as a shop context, would have been more appropriate.

Although this might indicate that there was not any progress made on the implementation of the pedagogical principle (Donaldson, 2015), it does suggest that my knowledge of how to do so has progressed through research. *Figure 1.1* and *Figure 1.2* are certainly better examples for yielding richer student outcomes but it could be argued that it had happened without my complete awareness of why it did so. Therefore, it is important that my next step includes better preparation on creating authentic contexts (Marin, 2014). There is clear evidence within the examples that there was not a sufficient amount of preparation put into the lesson shown in *Figure 1.3*. On the surface, people understand this notion of preparation to be associated with preparing resources and ensuring punctuality, but it should be noted that research suggests that my preparation should include more consideration of what meaningful work looks like and how it can be connected to the community (Hollins, 2006; 2011).

It should be noted that the class I was introduced to within PTE was already relatively familiar with assessment for learning strategies. However, despite this, my ability to implement them was not at the same level. *Figure 2.1* shows a list of strategies which I was encouraged to use during my time within the class. At the beginning of my teaching experience, I did try to implement these strategies and enhance the learning process (Kyriacou, 2009), however I had a tendency to use them excessively at a fixed point.

After researching assessment for learning, I discovered that it was important not to use these strategies excessively but to use them consistently across the lesson in a way which would enhance learning effectively (Bell & Cowie, 2001; Clinchot *et al.*, 2017). As my placement developed, I attempted to develop my use of these strategies – as seen in *Figure 2.2* – and it was found that the effects became more visible. Learners appeared more enthusiastic and reported back with good feedback – suggesting that this form of assessment was indeed supporting learning. However, despite coinciding with Gardner's claim that assessment should support learning (2012), my implementation did not maintain

OECD's dictation that these strategies should have a learning for all philosophy (2014). By this, I mean the assessment for learning strategies were beneficial to some of the students within the class but not for every student. After discussion with my mentor, I raised awareness of how different strategies are appropriate for attaining different outcomes, which is when I set myself the task of recognising the importance of lollipop sticks (see *Figure 2.2*).

Later during my PTE, I practised my development of the use of lollipop sticks. By this point, my research enabled me to develop an awareness of which strategies are appropriate for different contexts. Due to this, my practice led learners to take more ownership for their learning and encouraged more active pupil engagement (Watkins *et al.*, 2007). After taking into consideration the advice from my mentor, my practice showed significant progress since the start of my PTE. I developed a sound understanding of which assessment for learning strategies were appropriate for certain contexts (Welsh Government, 2010) and how to yield the greatest results (Donaldson, 2015; Hattie, 2012; Welsh Government, 2010).

Upon evaluating this progress, it's clear that my next steps include more research and preparation (Marin, 2014). By this I mean further research is needed into which are the appropriate strategies for certain contexts (Welsh Government, 2010); and by preparation, I mean I will need to develop better interpersonal relationships with the learners (Hollins, 2011; Hattie, 2012). The reason behind developing the teacher-student relationships is because it would enable me to have a better understanding of which strategies each learner would benefit from, so then I could plan for the use of certain strategies in advance (Welsh Government, 2010). In considering that a purpose of education is lifelong learning (Donaldson, 2015), it is important to learn these strategies and to develop the implementation of them carefully (Bell & Cowie, 2001; Clinchot *et al.*, 2017). Not doing so would open the possibility to implementing them ineffectively and could limit the potential of learning, thus failing to maintain the philosophy of learning for all (OECD, 2014). While richer preparation would mean attaining a sounder understanding of what each strategy is used for (Welsh Government, 2014).

Implementing cross-curriculum responsibilities is something which I also initially struggled with. One thing which I struggled with was keeping up with the demands of incorporating these responsibilities within the wide range of areas (as shown in *Figure 3.1*). Another thing was that I did not have a great amount of knowledge nor experience with cross-curriculum responsibilities. Whilst gaining experience, I came to the realisation of how important it is to implement this principle (Donaldson, 2015). Although I could see the benefits in implementing these responsibilities (i.e. Marzano, 1991; Hayes, 2017), my ability to deliver these benefits were significantly hindered.

With regards to *Figure 3.2*, for a Year 1 class this could be considered a complex task, so therefore I decided to try and make the task appear easier by making it more interesting (Renninger *et al.*, 2002). It is possible that due to this activity involving learning within an authentic context, the interest of the learners was maintained along with their effort; making the learning richer. The learners transferred what they had learned from the authentic contexts to this context (Marzano, 1991) and forged links between the content of their learning and the 'real world' (Donaldson, 2015). Amongst all of this, the learners were showing willingness to practise the cross-curriculum responsibilities (Donaldson, 2015) within the activity.

An important note to remember is that although there was good progress being made, I still found it a challenge to implement this principle as I was wary of making tasks too hard for a Year 1 class. I sought to maintain this progress throughout my PTE and carried out research to find ideas. As *Figure 3.3* shows, after this research I was able to implement different cross-curriculum responsibilities at the same time – in this case, numeracy and digital competence. *Figure 3.3* shows that I had made significant progress with regards to this pedagogical principle as initially I had limited knowledge and no experience with cross-curriculum responsibilities. However, *Figure 3.2* and *Figure 3.3* indicate that this knowledge and experience had transformed and I was able to be independent in planning for its

delivery.

It could be argued within *Figure 3.2* that it was successful due to the use of authentic contexts. Therefore, Marin's valuation of dedicating more time and effort to preparation plays a role within my next steps (2014) as this may enable me to further improve my ability to implement this principle. I have gained a far better understanding of cross-curricular responsibilities but there is still a considerable amount of knowledge to be obtained. This is agreed by Donaldson (2015) who claimed that this approach would mean a greater workload for teachers, thus richer preparation would only mean more effective teaching and learning. Also, as Donaldson (2015) indicated, cross-curriculum responsibilities have not been understood nor implemented at an appropriate standard and Marin's suggestion (2014) would enable me to improve this.

References

Saturday, January 4, 2020 6:10 PM

Ainley, M., Hidi, S., & Berndorff, D. (2002). Interest, learning, and the psychological processes that mediate their relationship. *Journal of Educational Psychology*, 94. pp. 545 – 561. doi: 10.1037/0022-0663.94.3.545

Alioon, Y., & Delialioğlu, Ö. (2017). The effect of authentic learning activities on student engagement and motivation. *British Journal of Educational Technology*, 50. doi:10.1111/bjet.12559.

Arthur, S., Crick, T., & Hayward, J. (2013). *The ICT Steering Group's Report to the Welsh Government*. Welsh Government.

Bell, B., & Cowie, B. (2001). The characteristics of formative assessment in science education. *Science Education*, 85(5). pp. 536 – 553.

Campbell, J., Kyriakides, L., Muijs, D., & Robinson, W. (2004). *Assessing Teacher Effectiveness: Developing a Differentiated Model*. London: RoutledgeFalmer.

Carlyle, T. (1841/2013). In Sorrensen, D. R., & Kinser B. E. (eds.), *On Heroes, Hero-Worship, and the Heroic in History*. New Haven: Yale University Press.

Clinchot, M., Ngai, C., Huie, R., Talanquer, V., Lambertz, J., Banks, G., Weinrich, M. (2017). Better Formative Assessment. *The Science Teacher*, 84(3), pp. 69–75.

Coe, R., Aloisi, C., Higgins, S., & Major, L. E. (2014). *What makes great teaching? Review of the underpinning research*. Sutton Trust: London.

Collins, J. (2004). Education Techniques for Lifelong Learning, *RadioGraphics*, 24 (5). doi: 10.1148/rg.245045020

Donaldson, G. (2015). *Successful Futures: Independent review of curriculum and assessment arrangements in Wales*. Cardiff: Welsh Government.

Estyn (2018). *Learning through play in a real-life context*. Available at: <https://www.estyn.gov.wales/effective-practice/learning-through-play-real-life-context> [Accessed 15 Dec. 2019].

Flowerday, T., Schraw, G., & Stevens, J. (2004). The role of reader choice and interest in reader engagement. *Journal of Experimental Education*, 72. pp. 93 – 114. doi: 10.3200/JEXE.72.2.93-114

Gardner, J. (2012). *Assessment and Learning (2nd ed.)*. London: Sage.

Harackiewicz, J., Durik, A., Barron, K., Linnenbrink, E., & Tauer, J. (2008). The role of achievement goals in the development of interest: Reciprocal relations between achievement goals, interest, and performance. *Journal of Educational Psychology*, 100. pp.

Hattie, J. (2012). *Visible learning for teachers*. London: Routledge.

Hayes, D. (2010). The seductive charms of a cross-curricular approach. *Education 3 - 13*, 38(4). pp. 381–387.

Hidi, S., & Ainley, M. (2008). Interest and self-regulation. The relationships between two variables that influence learning. In D. H. Schunk & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research, and application* (pp. 77 – 109). New York: Erlbaum.

Hollins, E. R. (2006). Transforming practice in urban schools. *Educational Leadership*, 63 (6). pp. 48 – 52.

Hollins, E. R. (2011). Teacher Preparation for Quality Teaching. *Journal of Teacher Education*, 62 (4). pp. 395 – 407.

Kiernan, P., & Aizawa, K. (2004). Cell phones in task based learning - Are cell phones useful language learning tools? *ReCALL*. 16. pp. 71 – 84. doi:10.1017/S0958344004000618.

Kyriacou, C. (2009). *Effective teaching in schools: theory and practice (3rd ed.)*. Cheltenham: Nelson Thornes.

Maina, F. W. (2004). Authentic learning: Perspectives from contemporary educators. *Journal of Authentic Learning*, 1 (1), pp. 1 – 8.

Marin, E. (2014). Are Today's General Education Teachers Prepared to Face Inclusion in the Classroom? *Procedia – Social and Behavioural Sciences*, 142 (C). pp. 702 – 707.

Marzano, R. J. (1991). Fostering thinking across the curriculum through knowledge restructuring. *Journal of Reading*, 34 (7). pp. 518 – 525.

Muijs, D., & Reynolds, D. (2005). *Effective Teaching: Evidence and Practice (2nd ed.)*. London: Sage.

NFER and Arad Research. (2013). *A Rapid Evidence Assessment on the Impact of Curriculum and Assessment Arrangements within High Performing Countries*. Welsh Government.

OECD. (2014). *Improving Schools in Wales: An OECD Perspective*. OECD: Paris.

Renninger, K., Ewen, L., & Lasher, A. (2002). Individual interest as context in expository text and mathematical word problems. *Learning and Instruction*, 12, pp. 467 – 490. doi: 10.1016/S0959-4752(01)00012-3

Rule, A. C. (2006). Editorial: The Components of Authentic Learning. *Journal of Authentic Learning*, 3 (1), pp. 1 – 10.

Schiefele, U. (1990). The influence of topic interest, prior knowledge, and cognitive capabilities on text comprehension. In J. M. Pieters, K. Breuer, & P. R. J. Simons (Eds.), *Learning environments* (pp. 323 – 338). Berlin: Springer. doi: 10.1007/978-3-642-84256-6_25

Schiefele, U. (1991). Interest, learning, and motivation. *Educational Psychologist*, 26, pp. 299 – 323.

Watkins, C., Carnell, E., & Lodge, C. (2007). *Effective Learning in Classrooms*. London: Paul Chapman.

Welsh Government. (2014). *Qualified for life: An education improvement plan for 3 to 19-year-olds in Wales*. Cardiff: Welsh Government.

Wilen, W., Hutchinson, J., & Ishler, M. (2008). *Dynamics of Effective Secondary Teaching* (6th ed.). New York: Pearson.